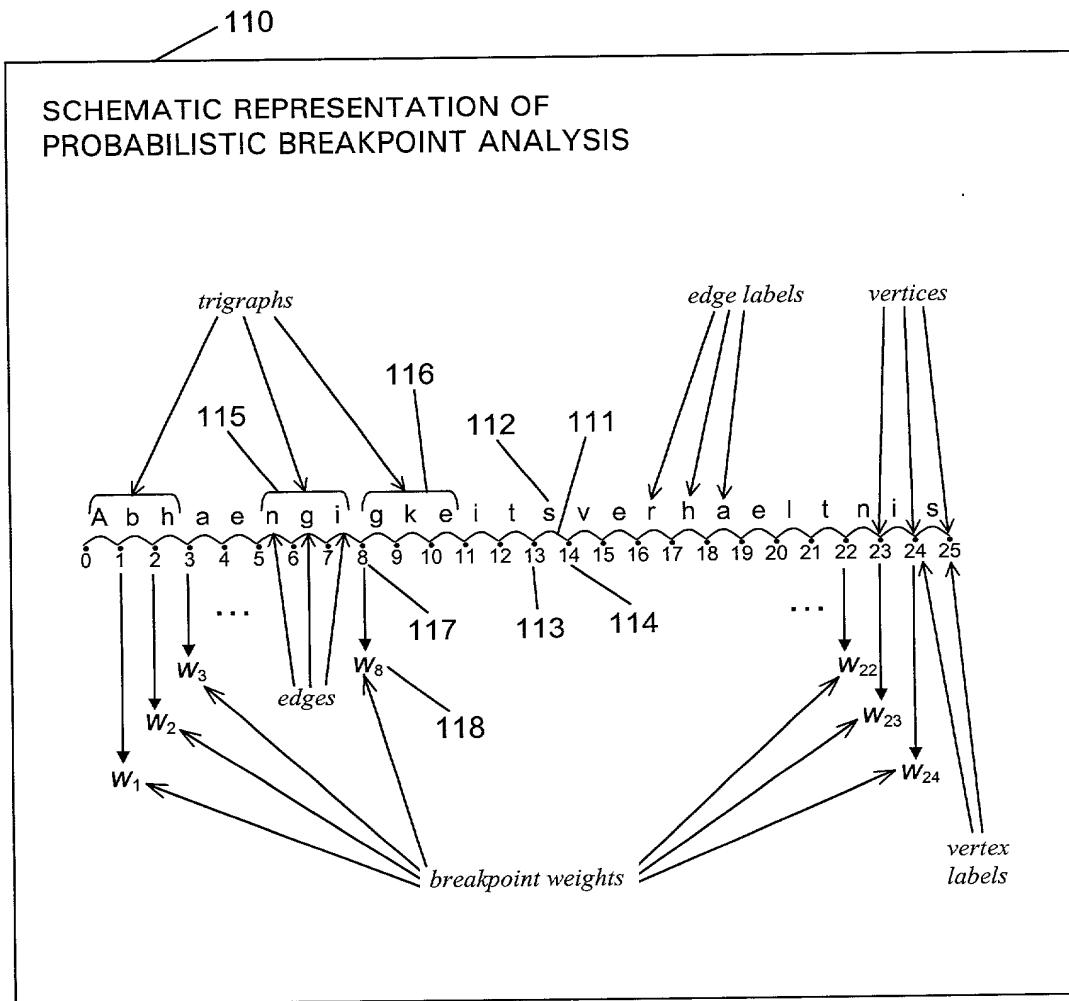


FIG. 1



ANALYZING: Abhaengigkeitsverhaeltnis

3:	Abh+aen	END = 0	START = 103	TOTAL = 103	9
4:	bha+eng	END = 3	START = 380	TOTAL = 383	6
5:	hae+ngi	END = 2	START = 0	TOTAL = 2	18
6:	aen+gig	END = 30	START = 49	TOTAL = 79	10
7:	eng+igk	END = 15	START = 0	TOTAL = 15	14
8:	ngi+gke	END = 3	START = 0	TOTAL = 3	17
9:	gig+kei	END = 70	START = 219	TOTAL = 289	7
10:	igk+eit	END = 2	START = 104	TOTAL = 106	8
11:	gke+its	END = 0	START = 0	TOTAL = 0	20
12:	kei+tsv	END = 13	START = 0	TOTAL = 13	15
13:	eit+sve	END = 3005	START = 12	TOTAL = 3017	2
14:	its+ver	END = 123	START = 31722	TOTAL = 31845	1
15:	tsv+erh	END = 0	START = 633	TOTAL = 663	5
16:	sve+rha	END = 0	START = 7	TOTAL = 7	16
17:	ver+hae	END = 301	START = 733	TOTAL = 1034	4
18:	erh+ael	END = 1	START = 45	TOTAL = 46	12
19:	rha+elt	END = 5	START = 70	TOTAL = 75	11
20:	hae+ltn	END = 2	START = 0	TOTAL = 2	19
21:	ael+tni	END = 17	START = 0	TOTAL = 17	13
22:	elt+nis	END = 1915	START = 50	TOTAL = 1965	3

FIG. 3

APPLN. FILING DATE: OCTOBER 18, 2001

TITLE: METHOD AND APPARATUS FOR EFFICIENT  
SEGMENTATION OF COMPOUND WORDS USING  
PROBABILISTIC BREAKPOINT TRAVERSAL

INVENTOR(S): ANDREW WILLIAM MACKIE

ATTORNEY DOCKET NO: 004968-056

SHEET 4 of 22

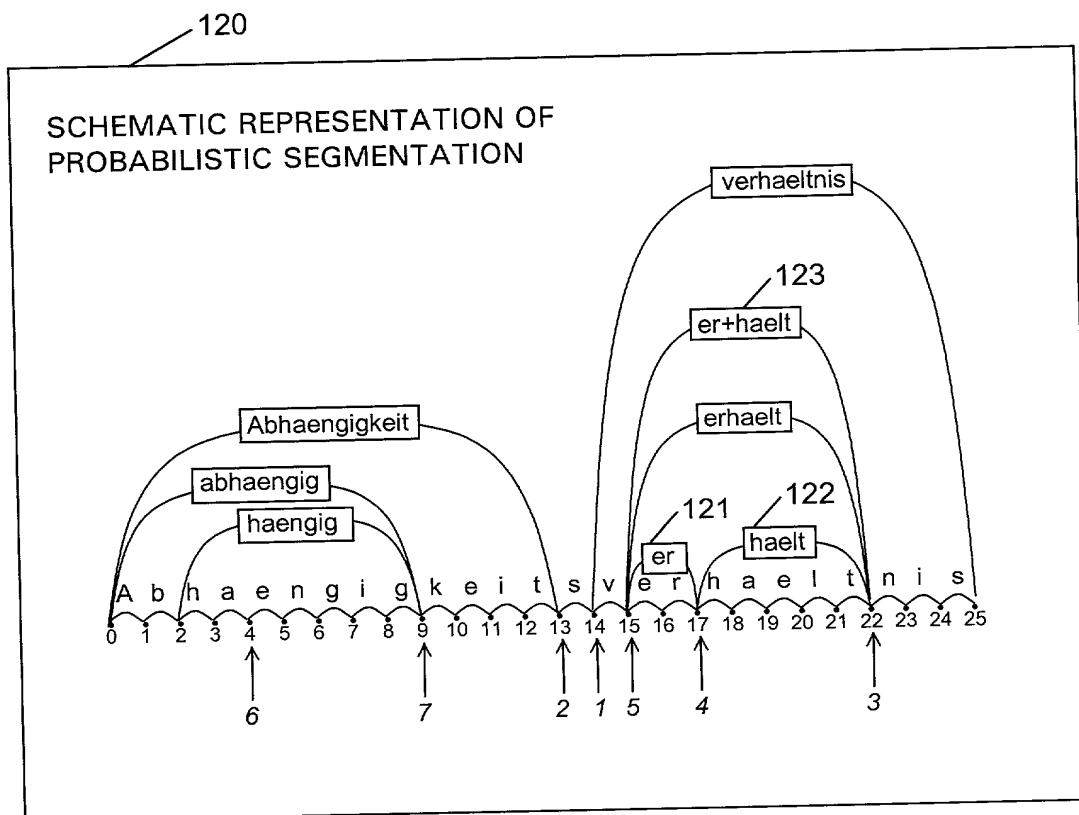


FIG. 4

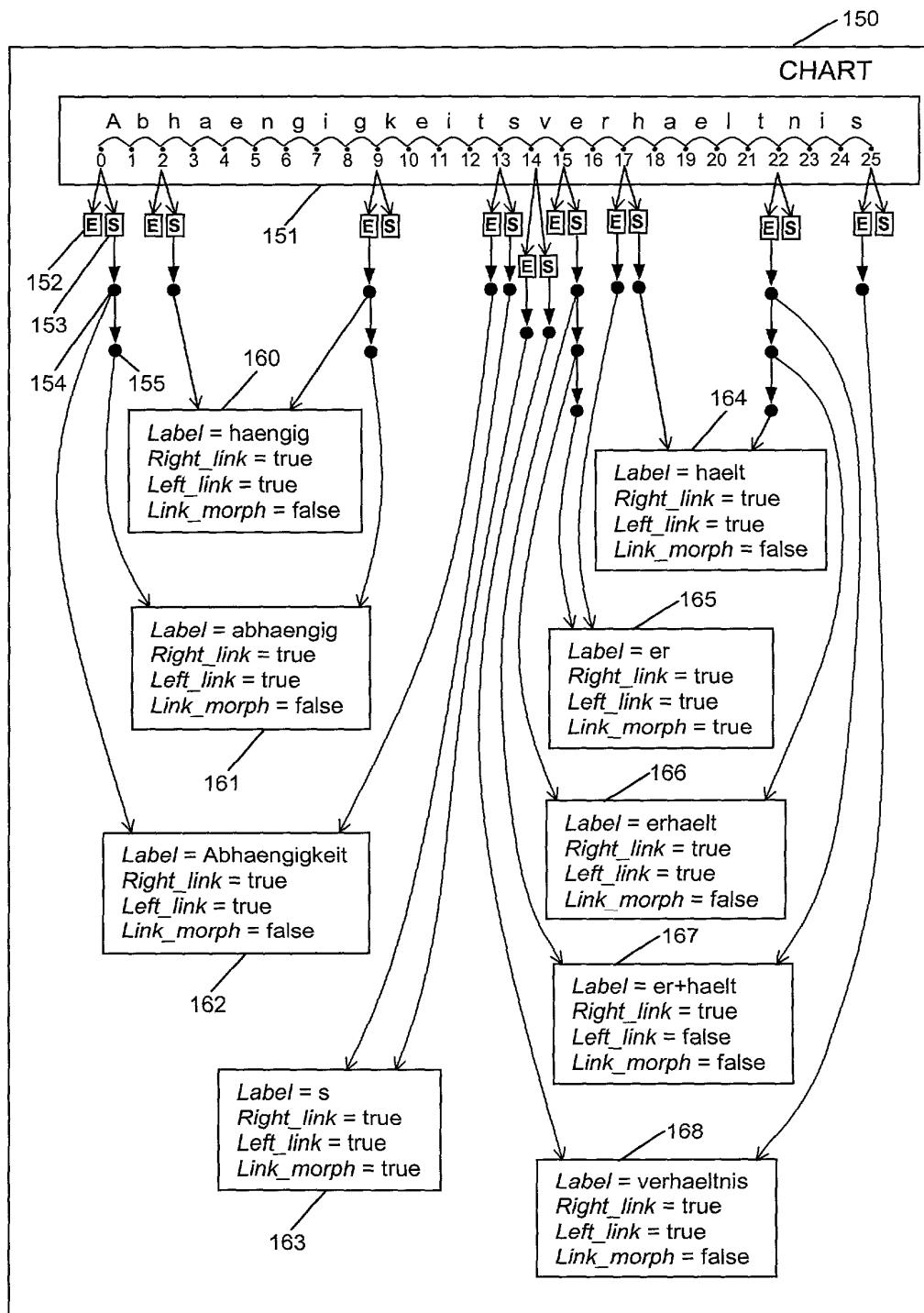


FIG. 5

```

Breakpoint 1 is at vertex 14 (score = 31845):
  Test(1) = 'Abhaengigkeits' [0, 14]
  Test(2) = 'verhaeltnis' [14, 25] -- FOUND: verhaeltnis
Pending Insertion: [14, 25]: verhaeltnis <+LL, +RL> -- COMPLETED
  Inspecting Leftward Edge: [13, 14]: s <+LL, +RL>
    -- PROPAGATED (as s + verhaeltnis from 13 to 25)
Pending Insertion: [13, 25]: s + verhaeltnis <-LL, +RL> -- COMPLETED

Breakpoint 2 is at vertex 13 (score = 3017):
  Test(1) = 'Abhaengigkeit' [0, 13] -- FOUND: Abhaengigkeit
Pending Insertion: [0, 13]: Abhaengigkeit <+LL, +RL> -- COMPLETED
  Inspecting Rightward Edge: [13, 14]: s <+LL, +RL>
    -- PROPAGATED (as 'Abhaengigkeit + s' from 0 to 14)
Pending Insertion: [0, 14]: Abhaengigkeit + s <+LL, -RL> -- COMPLETED
  Inspecting Rightward Edge: [14, 25]: verhaeltnis <+LL, +RL>
    -- PROPAGATED (as 'Abhaengigkeit + s + verhaeltnis' from 0 to 25)

-- SUCCEEDED: Abhaengigkeit + s + verhaeltnis
(3 lexicon accesses required [0.93%]); BP = 2

```

**A** → Abhaengigkeitsverhaeltnis      E Chart contains 12 edges      D

```

[ 4, 5]: e [#0]: <+LL, +RL>
[ 5, 6]: n [#1]: <+LL, +RL>
[10, 11]: e [#2]: <+LL, +RL>
[13, 14]: s [#3]: <+LL, +RL>
[15, 16]: e [#4]: <+LL, +RL>
[15, 17]: er [#5]: <+LL, +RL>
[19, 20]: e [#6]: <+LL, +RL>
[22, 23]: n [#7]: <+LL, +RL>
[14, 25]: verhaeltnis [#8]: <+LL, +RL>
[13, 25]: s + verhaeltnis [#9]: <-LL, +RL>
[ 0, 13]: Abhaengigkeit [#10]: <+LL, +RL>
[ 0, 14]: Abhaengigkeit + s [#11]: <+LL, -RL>

```

**B** → 1234567890123456789012345

**FIG. 6**

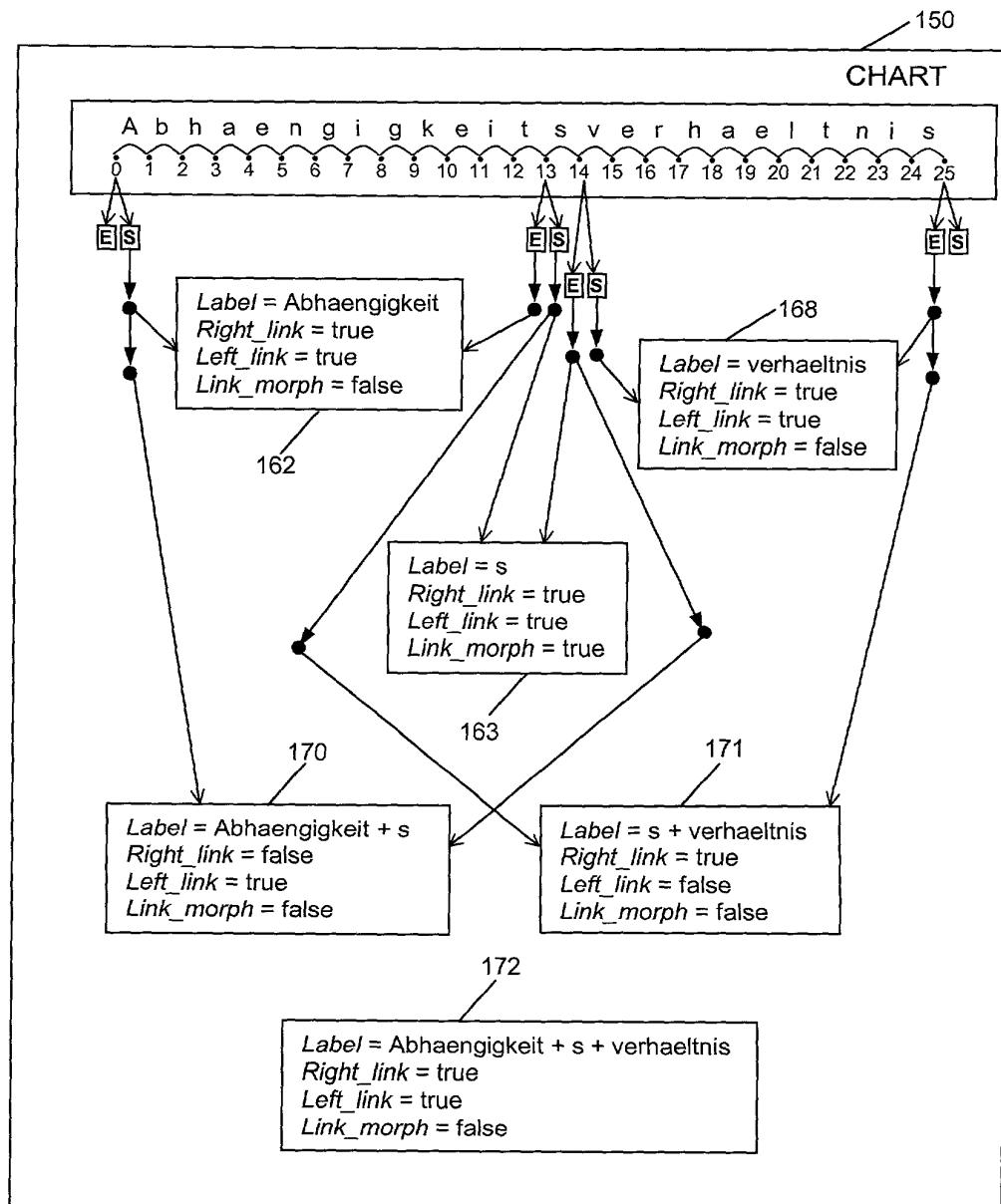
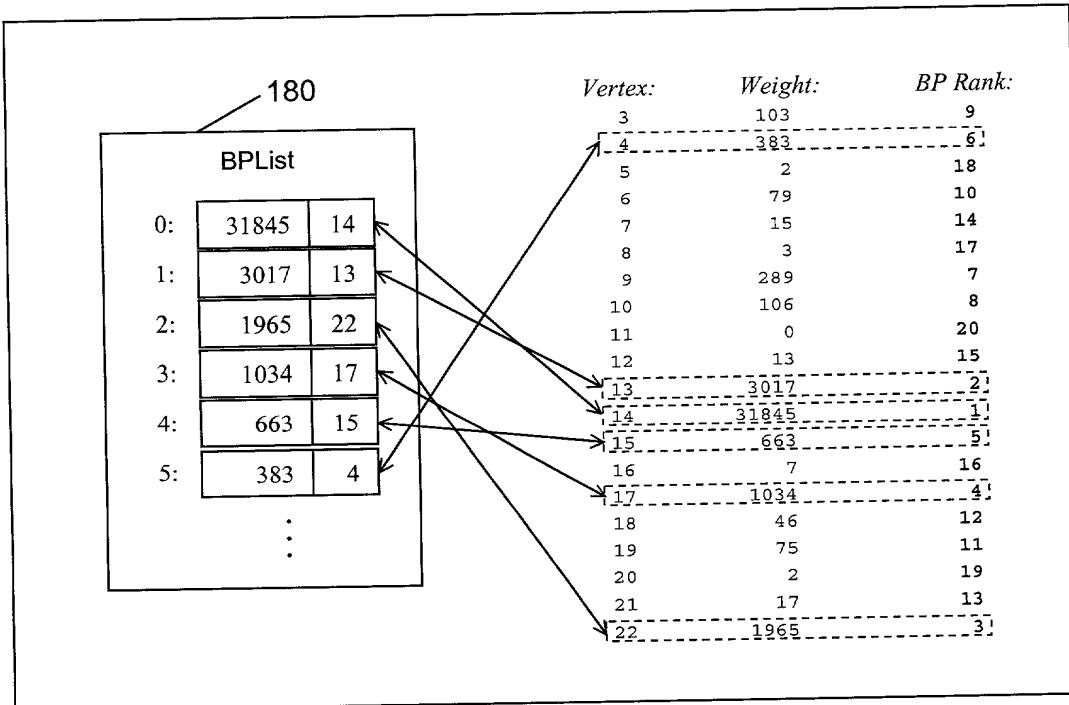


FIG. 7



**FIG. 8**

APPLN. FILING DATE: OCTOBER 18, 2001  
TITLE: METHOD AND APPARATUS FOR EFFICIENT  
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PROBABILISTIC BREAKPOINT TRAVERSAL  
INVENTOR(S): ANDREW WILLIAM MACKIE  
ATTORNEY DOCKET NO: 004968-056 SHEET 9 of 22

FAILED: Geschwerkschaftsorganisation  
Best guess is: {Gesch} Werk + schaft + s + Organisation  
(116 lexicon accesses required [28.64%]); BP = 18

Geschwerkschaftsorganisation	Chart contains 32 edges
.....werk .....	[ 5, 9]: Werk [#2552]: <+LL, +RL>
.....werks.....	[ 5, 10]: Werk + s [#2553]: <+LL, -RL>
.....werks.....	[ 5, 10]: Werks [#2554]: <+LL, +RL>
.....schaft.....	[ 9, 15]: schaft [#2555]: <-LL, +RL>
.....schafts.....	[ 9, 16]: schaft + s [#2556]: <+LL, -RL>
.....werkschafts.....	[ 5, 16]: Werk + schaft + s [#2557]: <+LL, -RL>
.....werkschaft.....	[ 5, 15]: Werk + schaft [#2558]: <+LL, +RL>
.....organisation	[16, 28]: Organisation [#2560]: <+LL, +RL>
.....organisation	[15, 28]: s + Organisation [#2561]: <-LL, +RL>
.....schaftsorganisation	[ 9, 28]: schaft + s + Organisation [#2562]: <+LL, +RL>
.....werkschaftsorganisation	[ 5, 28]: Werk + schaft + s + Organisation [#2563]: <+LL, +RL>
.....gani.....	[18, 22]: Gani [#2565]: <+LL, +RL>
.....ganis....	[18, 23]: Gani + s [#2566]: <+LL, -RL>
.....haft.....	[11, 15]: Haft [#2567]: <+LL, +RL>
.....hafts.....	[11, 16]: Haft + s [#2568]: <+LL, -RL>
.....haftsorganisation	[11, 28]: Haft + s + Organisation [#2569]: <+LL, +RL>
.....anis....	[19, 23]: Anis [#2570]: <+LL, +RL>
.....organ....	[16, 21]: Organ [#2571]: <+LL, +RL>
.....sorgan....	[15, 21]: s + Organ [#2572]: <-LL, +RL>
.....schaftsorgan.....	[ 9, 21]: schaft + s + Organ [#2573]: <+LL, +RL>
.....werkschaftsorgan.....	[ 5, 21]: Werk + schaft + s + Organ [#2574]: <+LL, +RL>
.....haftsorgan.....	[11, 21]: Haft + s + Organ [#2576]: <+LL, +RL>
.....schwer.....	[ 2, 8]: schwer [#2577]: <+LL, +RL>
.....eschwer.....	[ 1, 8]: e + schwer [#2578]: <-LL, +RL>

1234567890123456789012345678

FIG. 9

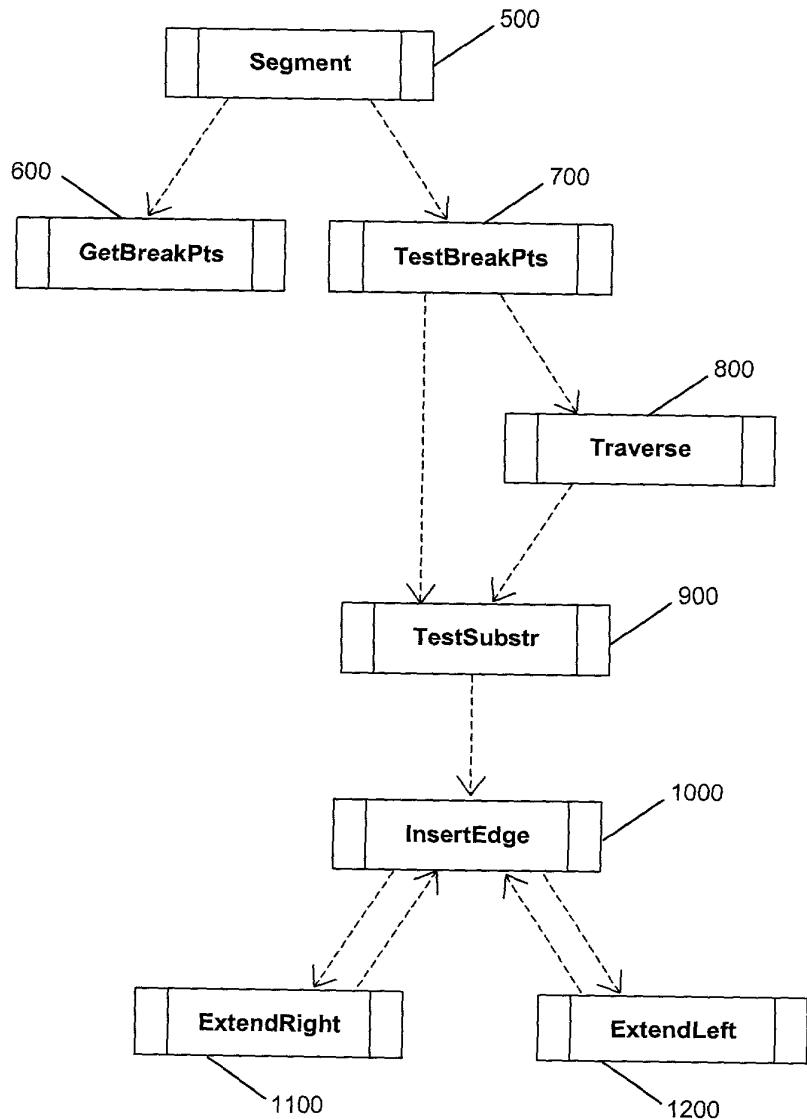


FIG. 10

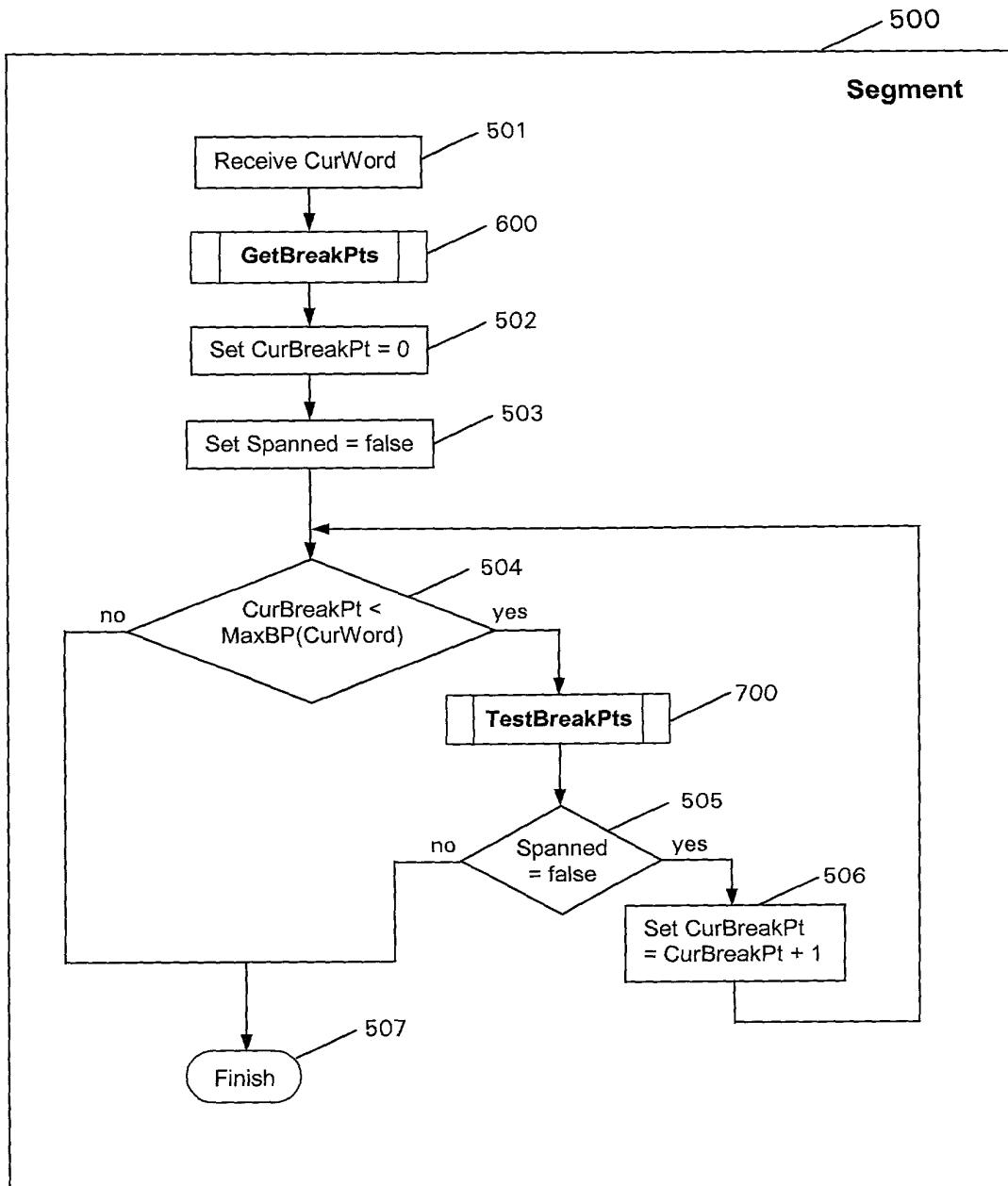


FIG. 11

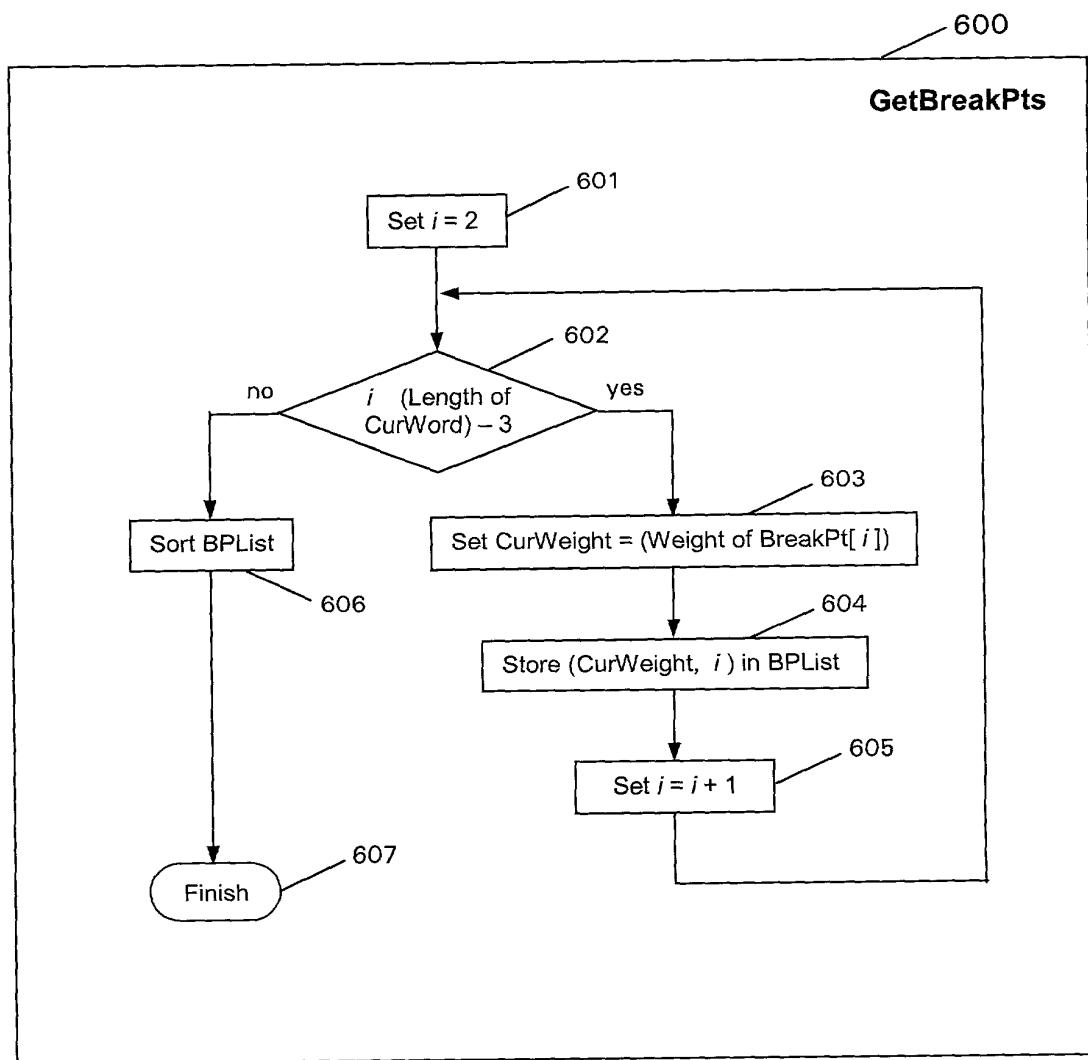


FIG. 12

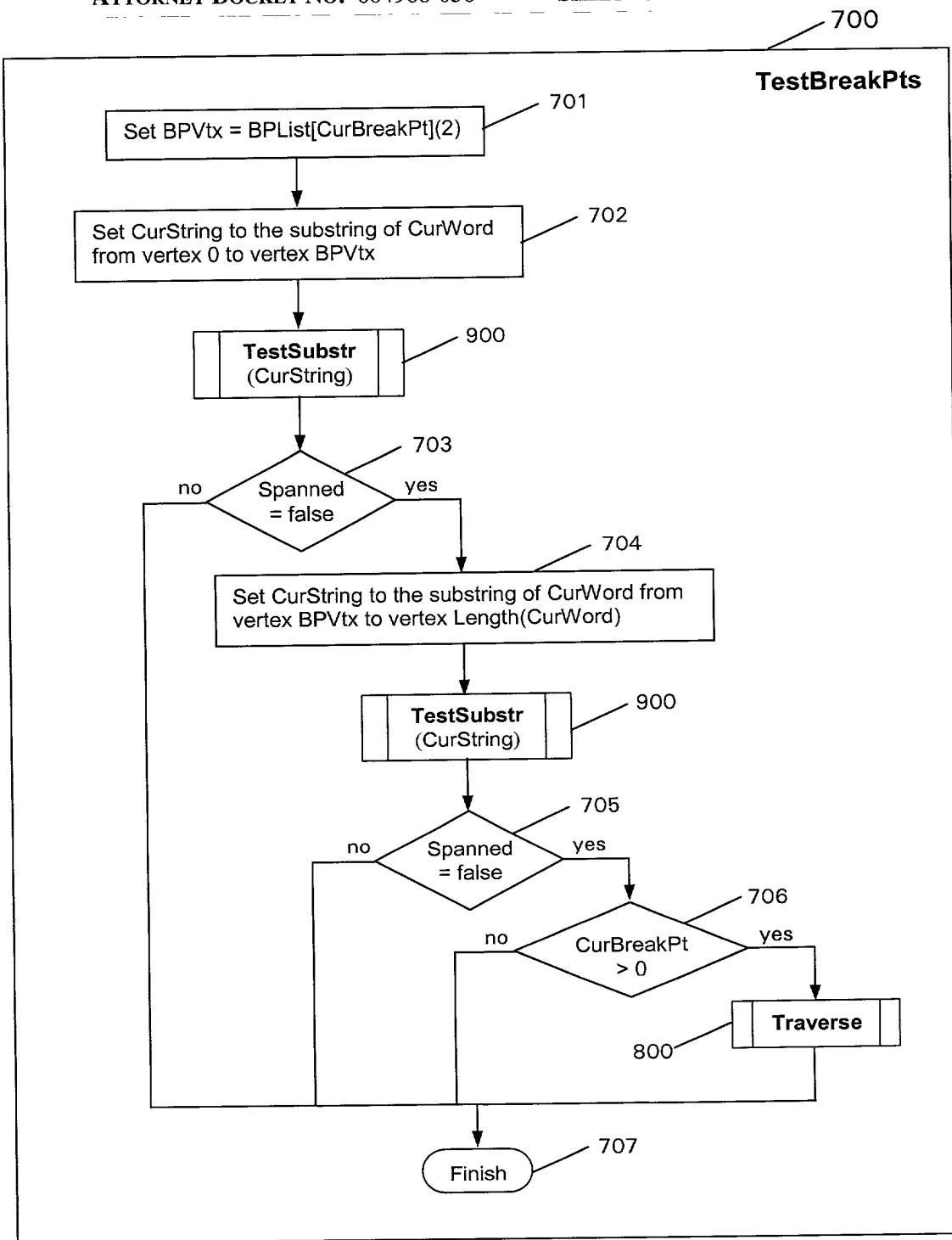


FIG. 13

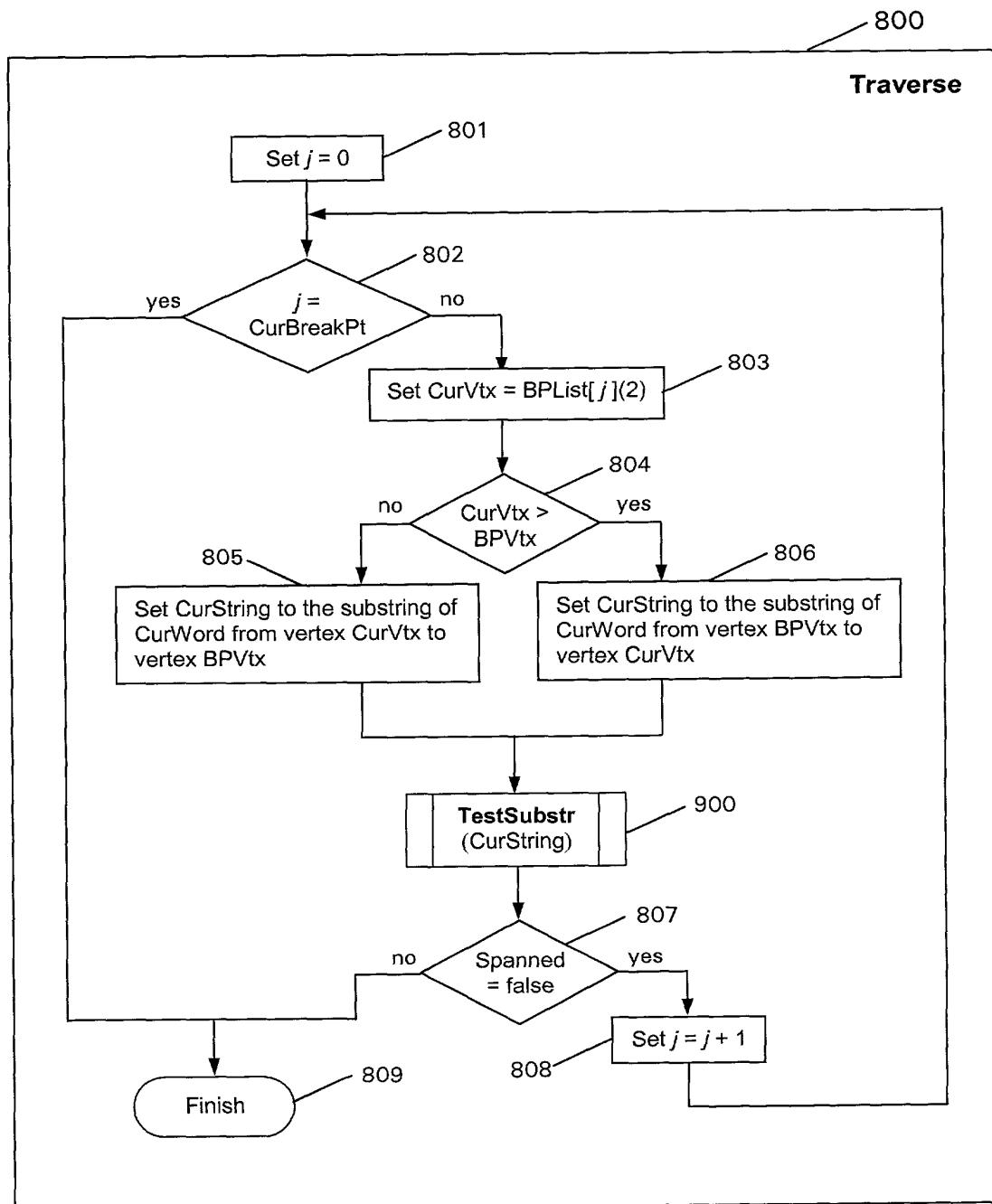


FIG. 14

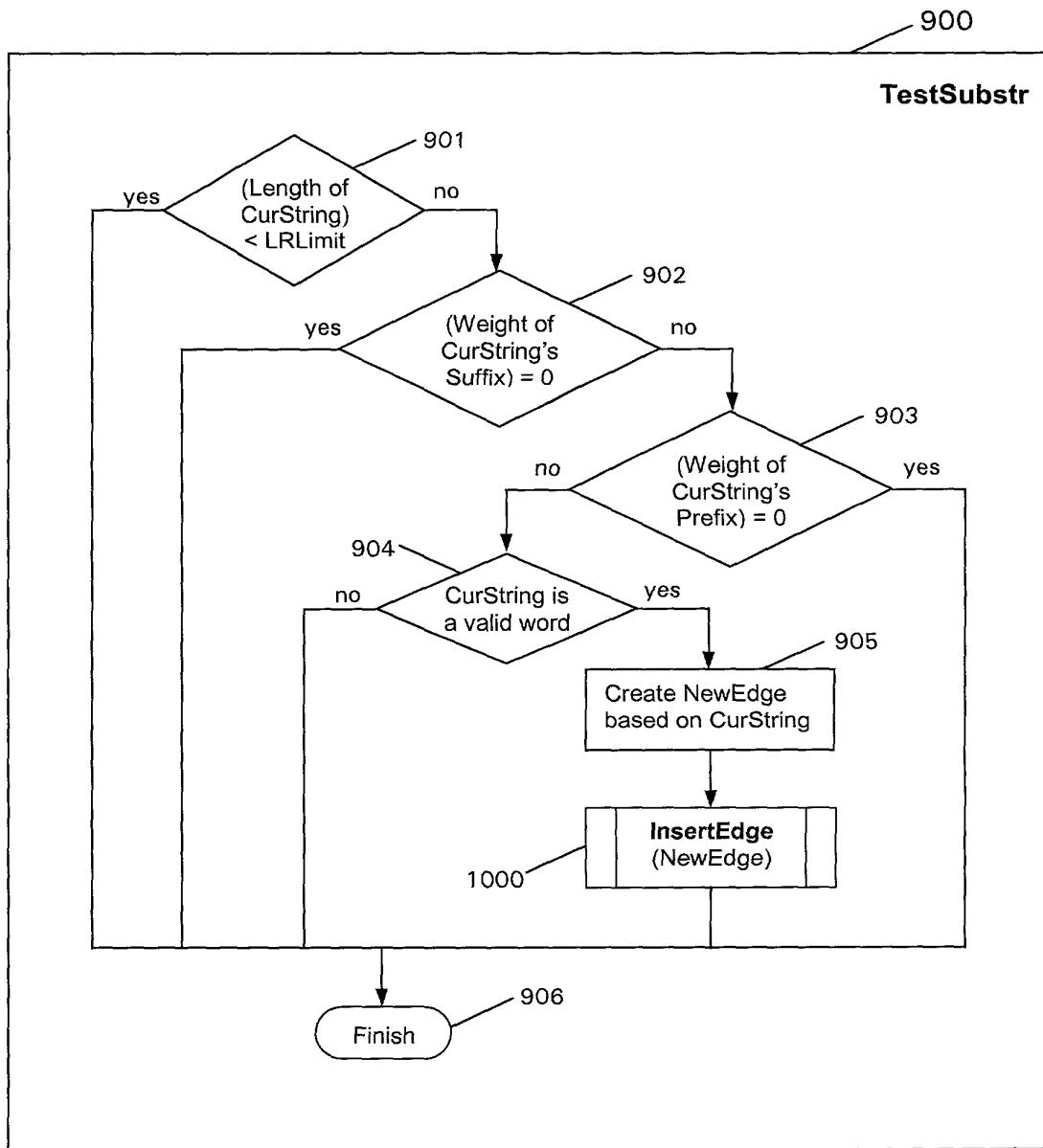


FIG. 15

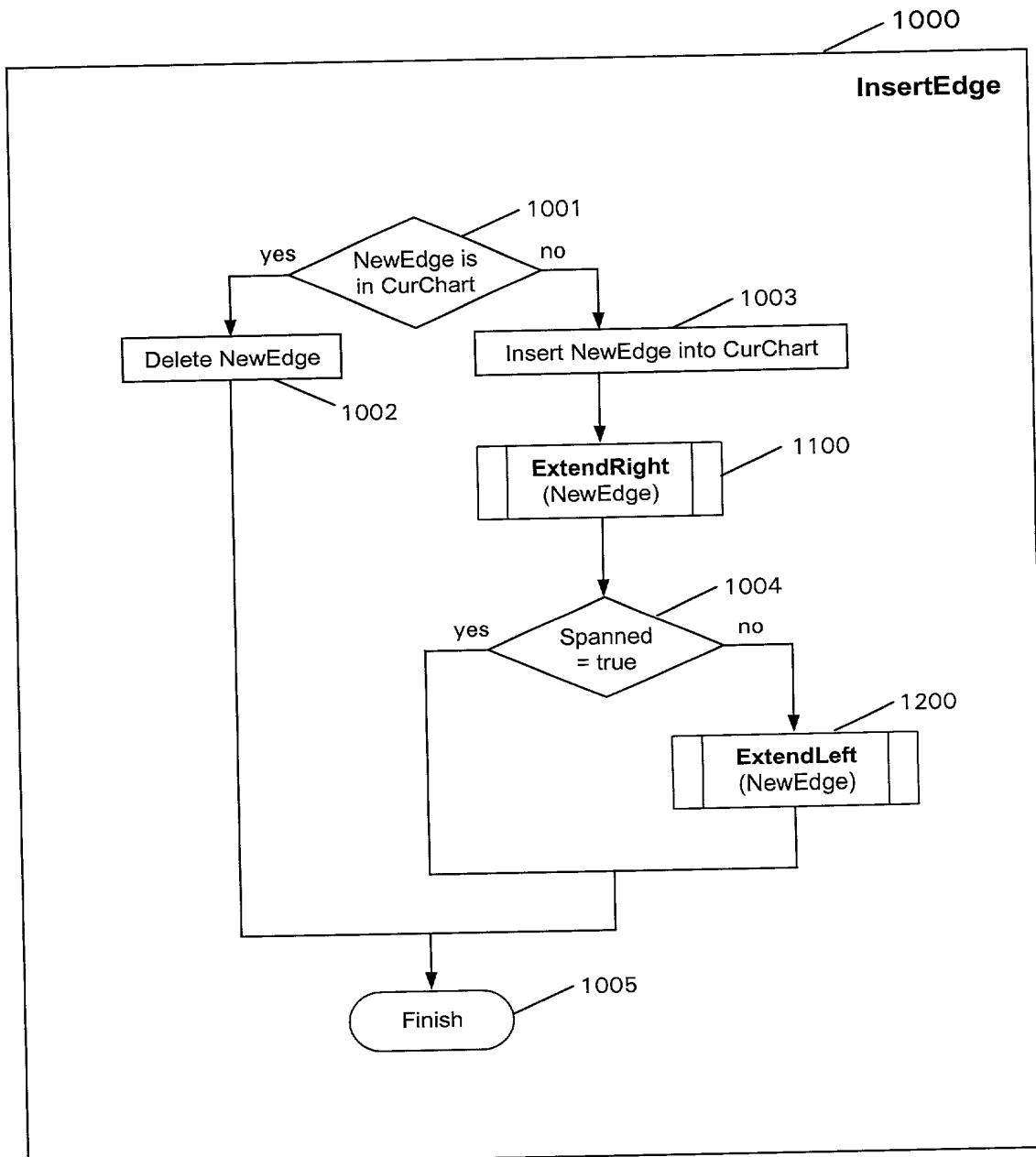
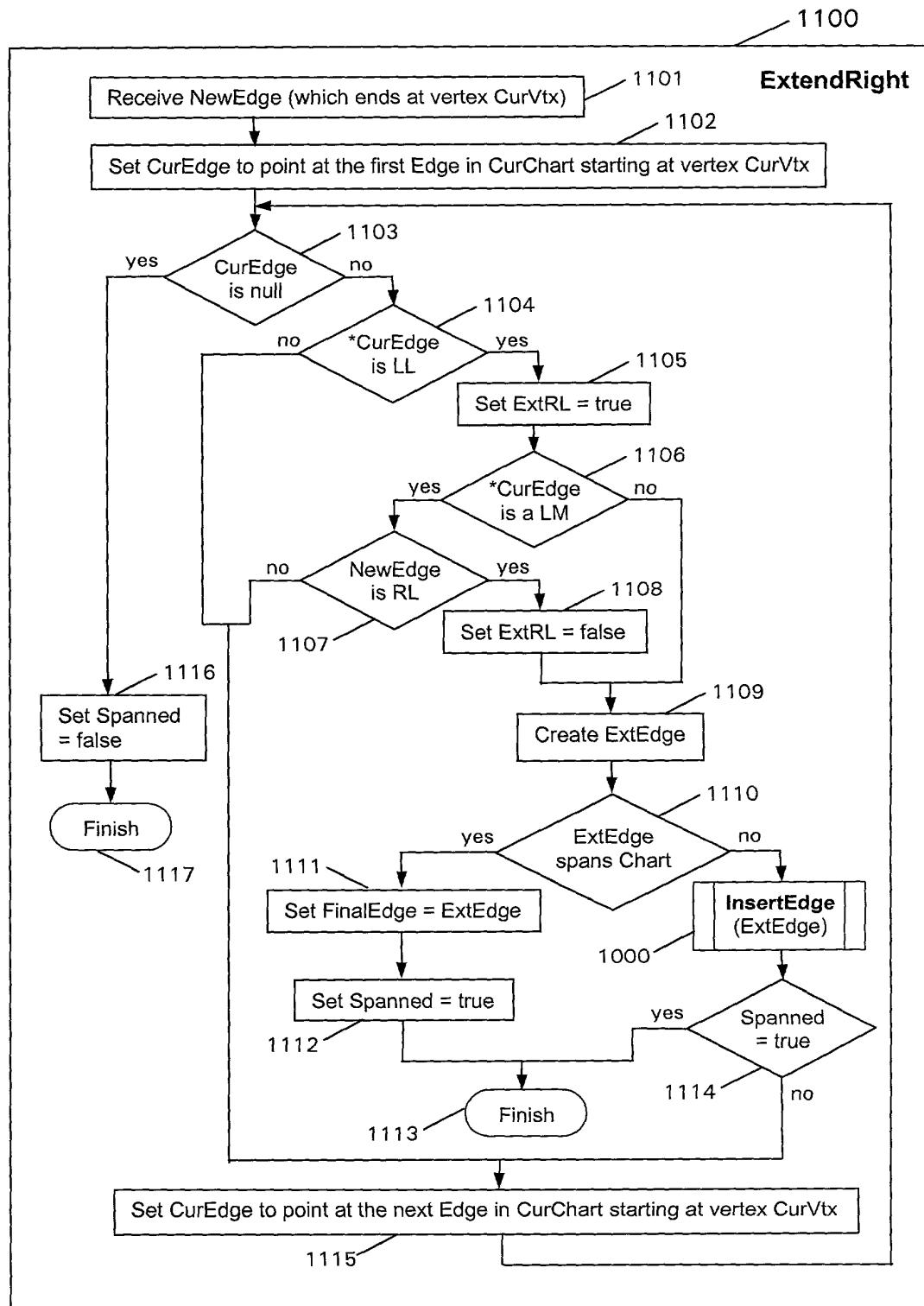
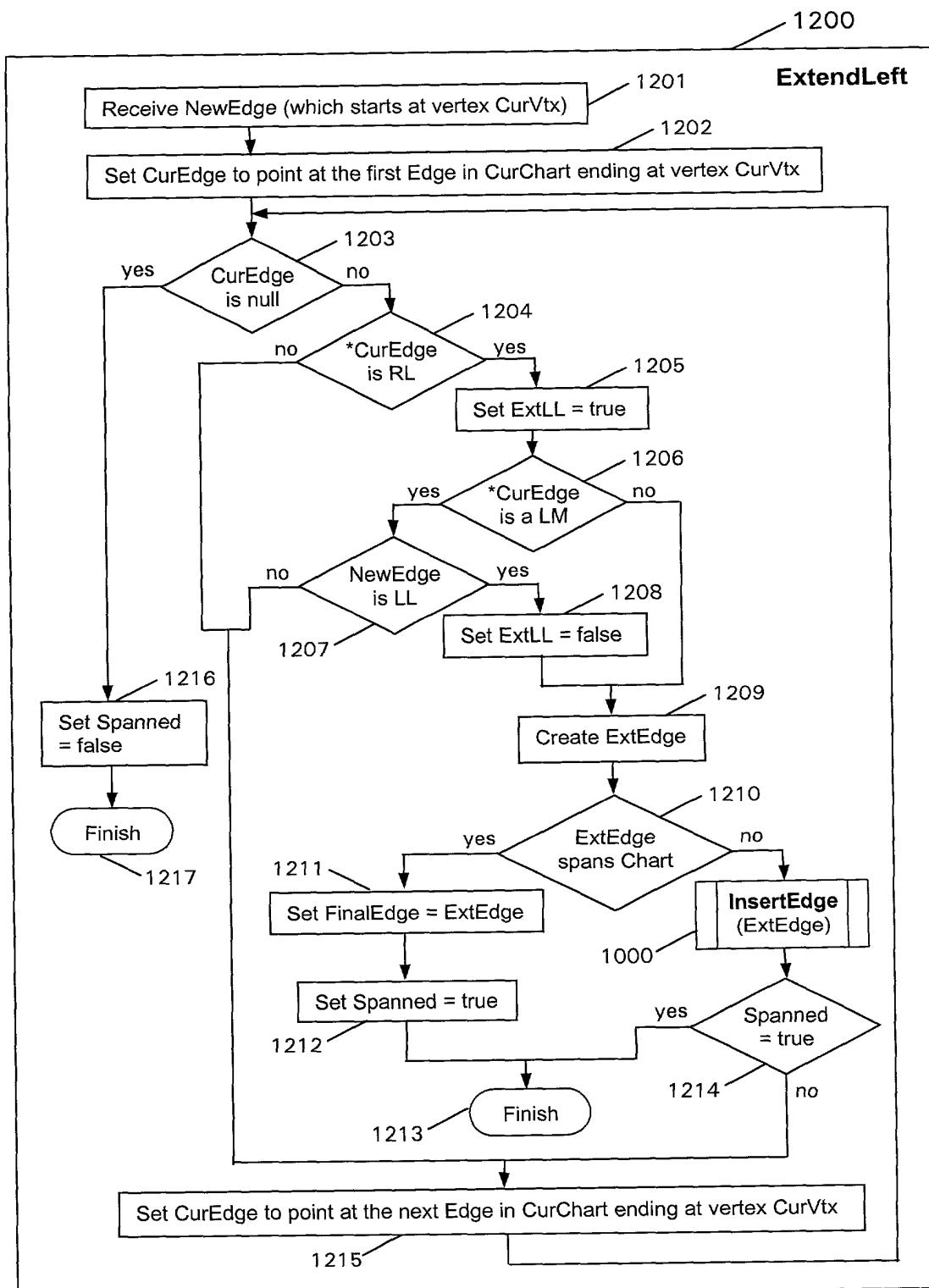


FIG. 16



**FIG. 17**



**FIG. 18**

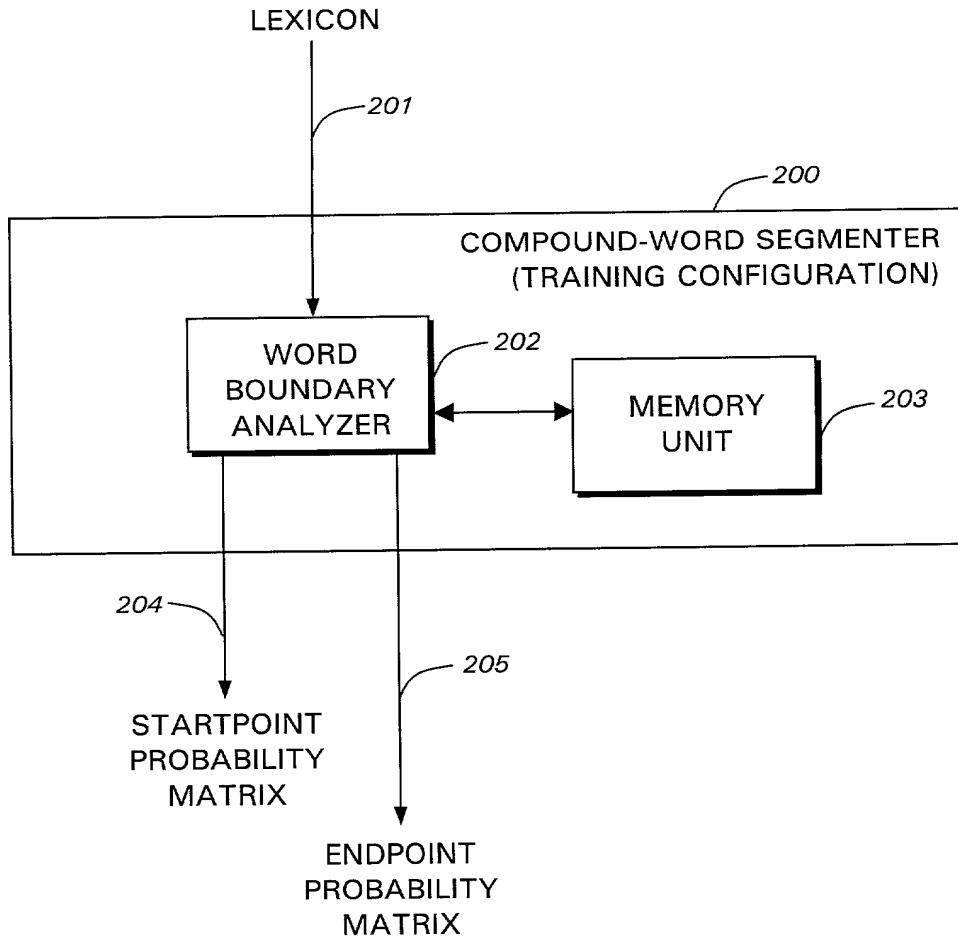


FIG. 19

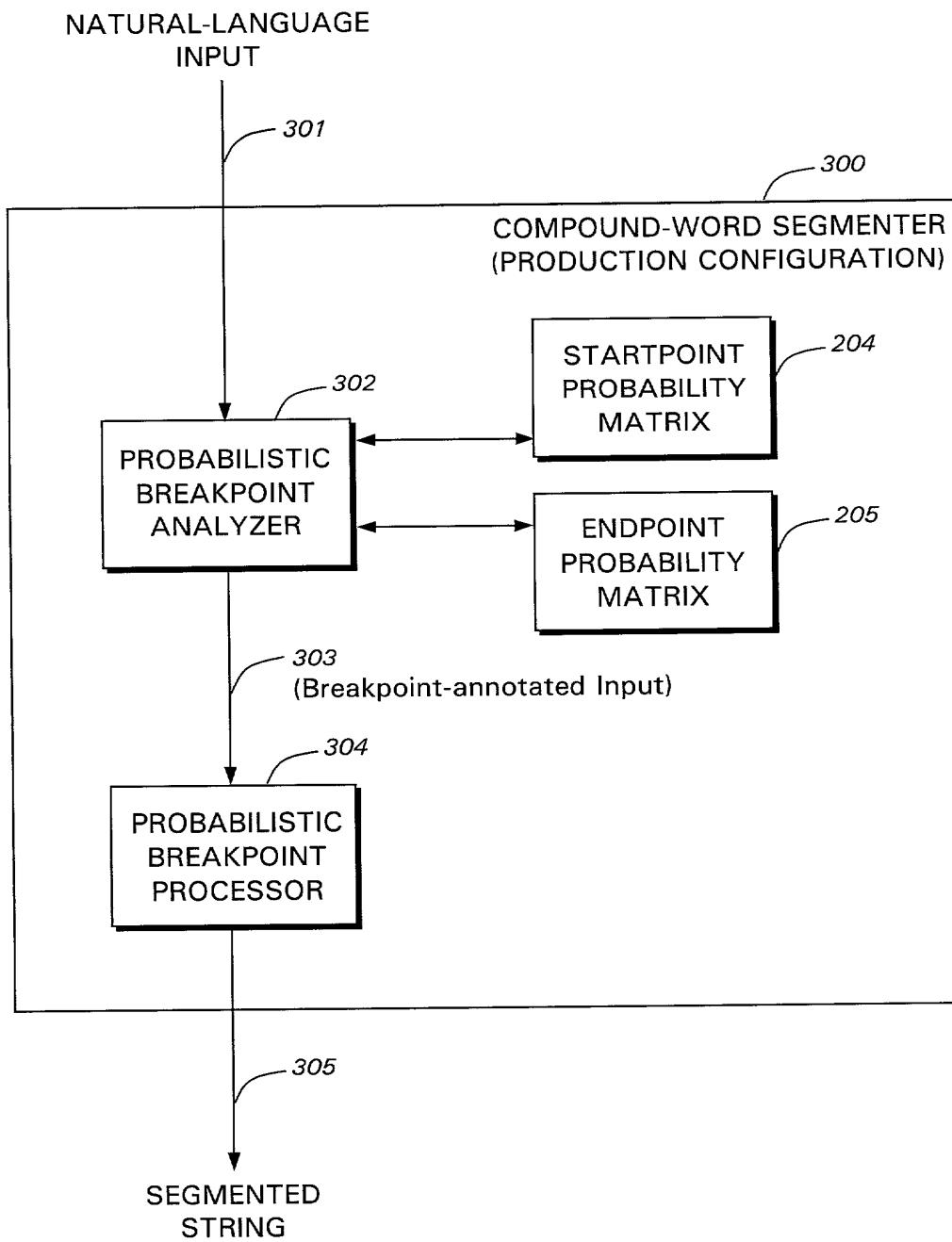
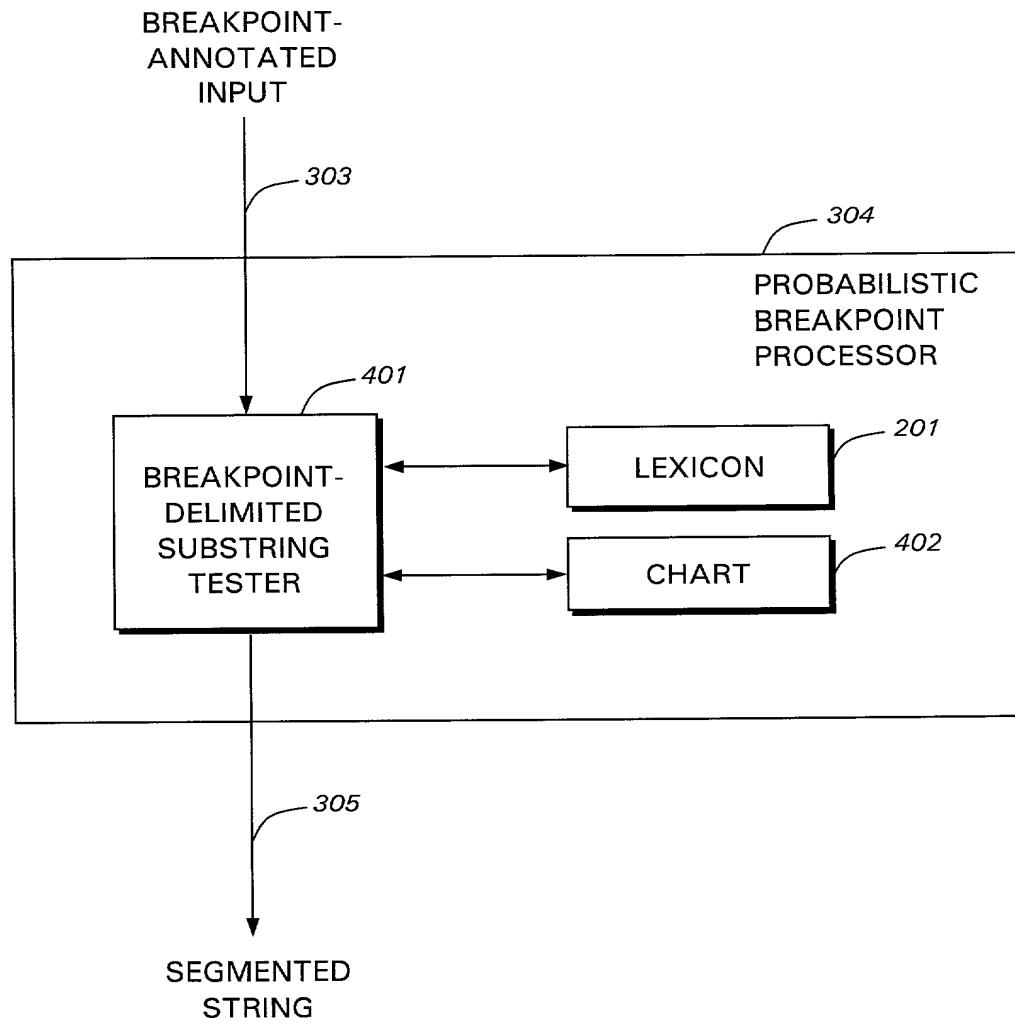


FIG. 20



**FIG. 21**

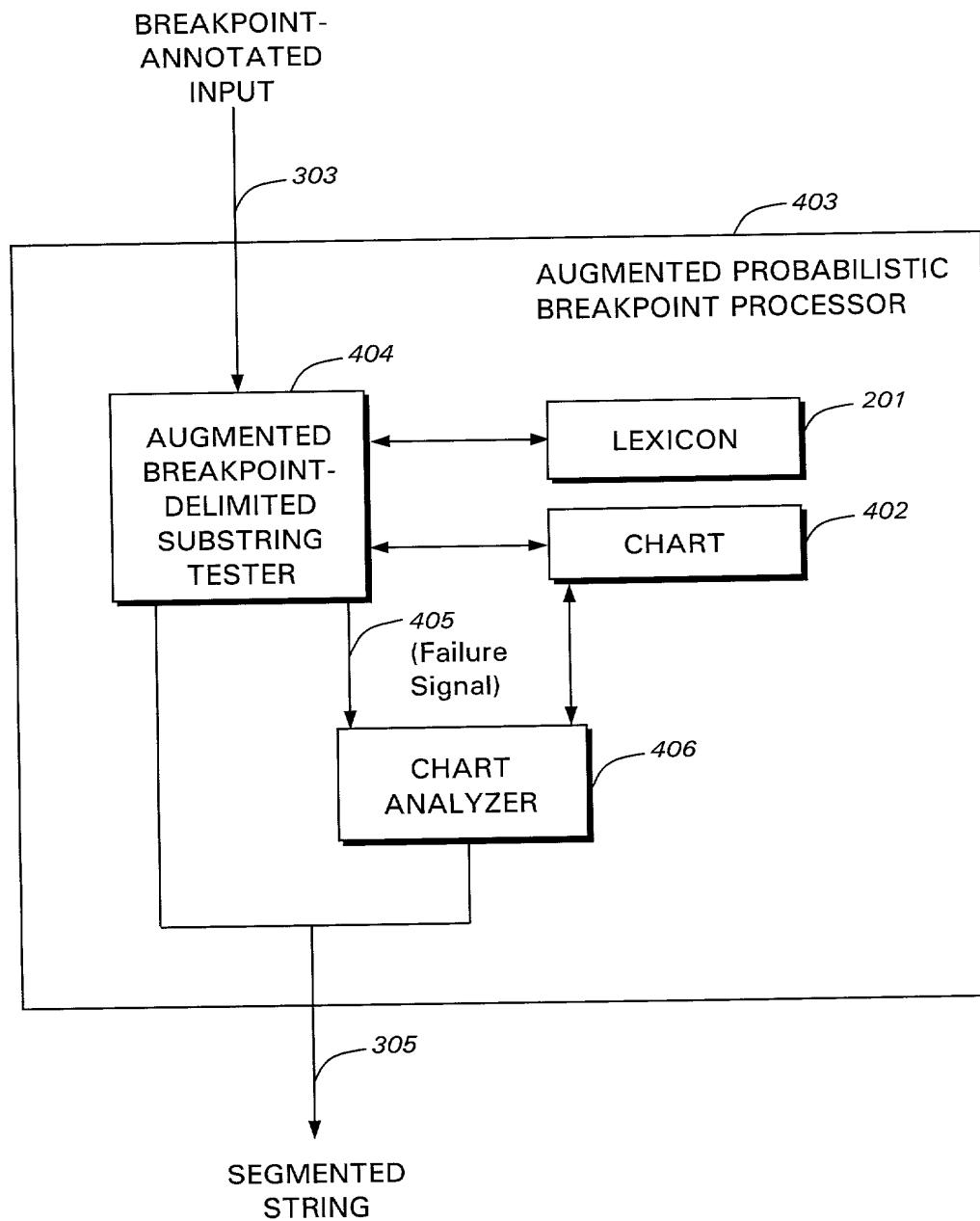


FIG. 22